

BUILDING PROJECTS IN HEALTH SCIENCES LIBRARIES

International health sciences library perspectives

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Editors' note: With the theme of MLA '13, the Medical Library Association 2013 annual meeting, "One Health: Information in an Interdependent World" in mind, we dedicate this year's Building Projects in Health Sciences Libraries column to library construction and renovation projects that have taken place outside of the United States. As evidenced by the examples in this year's column, projects in other countries have many similarities with those in the United States. Library spaces throughout the world are becoming community hubs for their organizations' personnel. They are providing collaborative and immersion spaces for groups to share ideas and to create and transfer knowledge. Print collection footprints are being reduced as digital information dominates, leading to the ability to invite others into expanded library space to engage and interact. Light, refreshing, and welcoming library environments enhance users' experiences and encourage these innovative collaborations and synergies. Additional photographs and floor plans of these seven featured libraries as well as additional library reports can be found at this column's accompanying MLANET website <<http://www.buildings.mlanet.org>>.

**Al Maktoum Medical Library,
Mohammed Bin Rashid
Academic Medical Center,
Dubai, United Arab Emirates**

**Submitted by Avril Reid, MSc,
Dip Lib, BA (Gen), Manager**

The Al Maktoum Medical Library (AMML), an institution of the Mohammed Bin Rashid Academic Medical Center (MBR-AMC), is located in Dubai, United Arab Emirates (UAE). The library, housed in the MBR-AMC, is a well-positioned, state-of-the-art facility, serving the Dubai Healthcare City Community (DHCC) of more

than 4,000 health care professionals. DHCC includes 120 clinics, a hospital with 200 beds, and an academic component. The latter comprises the Dubai School of Dental Medicine and the Khalaf Ahmad Al Habtoor Medical Simulation Center. The MBR-AMC is also home to the Royal College of Surgeons of Ireland, Dubai Campus, and supports other academic institutions such as the European University College.

The UAE is home to beautiful buildings and architecture, and the AMML, as the flagship medical library in the region, is certainly one of these. The AMML opened in January 2013, and the existing floor plan of 15,000 square feet includes spaces for interactive activities, study, and reading (Figure 1).

An impressive custom-designed information desk, fashioned in the architectural style used throughout the building, provides a focal point at the entrance to the library. The space is light and airy with optimum use of glass paneling throughout. Two lounges are assigned for faculty and resident group study. A sun lounge for casual reading offers seating with comfortable leather armchairs.

Seating is also provided throughout with red upholstered benches affixed to the walls, offering a space for those browsing resources in the stacks. The interior finishes and tone of the shelving blend with the beautiful burgundy leather wall panels, which are present throughout the library.

A cozy special collections room with the atmosphere of a private study is a noted feature of the facility, with temperature controls to house a rare book collection. Two meeting rooms are available for small group training sessions and library orientations, equipped with multimedia systems and double screens. Larger classrooms and conference facilities are also available in the MBR-AMC.

The AMML offers twenty workstations and study carrels in its Information Commons, with wireless connectivity throughout the building. Storage space is provided with a copy room and two store rooms. Patrons of AMML anxiously await a coffee shop and restaurants in the MBR-AMC, which will be added in 2014.

The continuous positive feedback from the numerous visitors

Figure 1

Spiral stairwell leading to the rotunda and hospitality lounge or Masjlis, Al Maktoum Medical Library



Photograph by Avril Reid, Mohammed Bin Rashid Academic Medical Center.

to the AMML provides proud moments for all those involved in its creation. It was designed to provide comfortable surroundings and access to the best available resources, service, and technologies in alignment with the needs of users and the entire DHCC community.

Regional Library and Information Service, Dr. Steevens' Hospital, Health Service Executive, Dublin, Ireland

Submitted by Aoife Lawton, MLIS, BA (Hons), Systems Librarian, and Bennery Rickard, DipLIS, BA (Hons), Regional Librarian

The decision to renovate the Regional Library and Information Service at Dr. Steevens' Hospital came at a time when Ireland was in the middle of its worst economic recession in modern times. A recession is usually a time to cut back or downsize, but it also offers an opportunity to refocus and redesign. Dr. Steevens' Hospital was built in 1720. It ceased to be a functional hospital in the 1980s and was retained as administrative health quarters of the then named Eastern Health Board. The regional librarian established the current library in 2002. In 2005, all health boards in Ireland were amalgamated into a new national organization called the Health Service Executive. Dr. Steevens' Hospital has since become an important administrative building for the Health Service Executive. However, library usage statistics showed a significant drop in "walk-in" users, book lending, and library consultations, which made it imperative to change the layout and function of the library. The library facility had remained largely unchanged for nearly a decade. In 2011, a business proposal was put forward. As long as costs were kept to a minimum, there was general agreement from management that a redesign was due.

The redesign project was managed by the regional librarian with input from all library staff. Methods used to inform decisions related to the project were a literature review, an online questionnaire, and focused

Figure 2

Regional Library and Information Service, Dr. Steevens' Hospital Library



Photograph by Aoife Lawton, Dr. Steevens' Hospital.

interviews with twelve key building stakeholders, and a business case was made. Library staff visited other libraries including a modern one, PricewaterhouseCoopers in Dublin, and a traditional one, the Oireachtas Irish Government Library at Leinster House. Team meetings were held to allocate tasks.

The biggest change was relocating the majority of the library's books to basement storage and removing all of the stacks with the exception of one wall lined with a selection of core books and some print journals (Figure 2). An area with six computers was transformed into an easy seating area, and all computers were recycled, bar one. Initially, no computers were available to the public, but visitors requested access, so one was reinstated. One librarian's office was converted into a meeting room for use by all visitors and employees of the health services. This room doubles as a training room for library orientation sessions.

Installation of new green carpet made a huge impact, and "Georgian white" paint was applied, with a feature wall using a shade of burgundy. The library now has an open office plan where librarians are more visible. All notice boards were removed. The cost came to approximately \$10,800 with support for painting, carpeting, and carpentry coming from the Facilities Department.

Furniture and equipment were recycled both from within the library and from offices elsewhere. Costs incurred included: painting, carpeting, hiring a removal company, and installing additional data points and a blackout blind. Fresh plants and donated artwork adorn the walls. The result is a fresh modern library with different spaces for health professionals to use that adapt to their needs.

Academy of Nursing and Allied Health Sciences Library, College of Science Technology and Applied Arts of Trinidad and Tobago, El Dorado Campus, Trinidad, West Indies

Submitted by Ayaana Alleyne-Cumberbatch, BA, MLIS, Campus Librarian

To increase the number of trained nurses and health care professionals in Trinidad and Tobago, the Ministry of Tertiary Education and Skills Training (MTEST), the College of Science Technology and Applied Arts of Trinidad and Tobago (COSTAATT), and the University of the West Indies (UWI) were asked to deliver tertiary-level teaching programs in multiple disciplines. As a result, the Academy of Nursing and Allied Health (ANAH) campus was established at El Dorado, which is located in the east of the island of Trinidad.

Figure 3

Academy of Nursing and Allied Health Sciences Library, College of Science Technology and Applied Arts of Trinidad and Tobago



Photograph by Ayaana Alleyne-Cumberbatch, College of Science Technology and Applied Arts of Trinidad and Tobago.

The El Dorado campus site was initially a youth training facility for girls. It was repurposed to include the ANAH administrative offices, classrooms, simulation and computer labs, and a library. The construction of the El Dorado campus is a two-phased project, and the library was not originally included in the first phase. However, as the first phase of the project evolved, the need for a library space became critical. The availability of adequate library service is a key element in the higher education accreditation process. To satisfy accreditation requirements, the existing 4,876-square-foot auditorium was transformed into a newly refurbished library, with seating for 73 patrons.

COSTAATT's acting director of library services, along with its facilities management team, was responsible for the design and layout of the library. The end result is a split-level design that includes a librarian's office, meeting room, and service area.

On the upper level behind the circulation desk, there is a 276-square-foot, sound-proofed meeting room, which facilitates group meetings, tutorials, and group discussions. The librarian's office overlooks the main library space

and is adjacent to the meeting room. In the main service area, a 25-foot-long circulation desk extends across the front of the library. There is electronic access to books and journals and text-based information. The service area houses the library's monograph collection, 4 6-seat computer carrels, and 4 6-seat reading tables that facilitate group study and collaboration, as well as 15 computer carrels for individual study (Figure 3). Infrastructure has been put in place for 10 walk-up computer stations to be added in the near future.

Although seating and computer access can be insufficient at times because of user demand, wireless access throughout the campus makes it possible for users to have access to library resources through the use of their personal devices.

Currently, COSTAATT's nursing students constitute the main clientele of the library. The students of the allied health sciences program will use the library when they commence classes at this location in 2014. In addition, students of the UWI School of Nursing program will have access to the facility. It is foreseeable that these diverse users will transform the library into an information hub

facilitating collaborative learning and networking among Trinidad and Tobago's future nurses and allied health care professionals.

Denmark Hill Campus Libraries, King's College London, Waterloo, London, United Kingdom

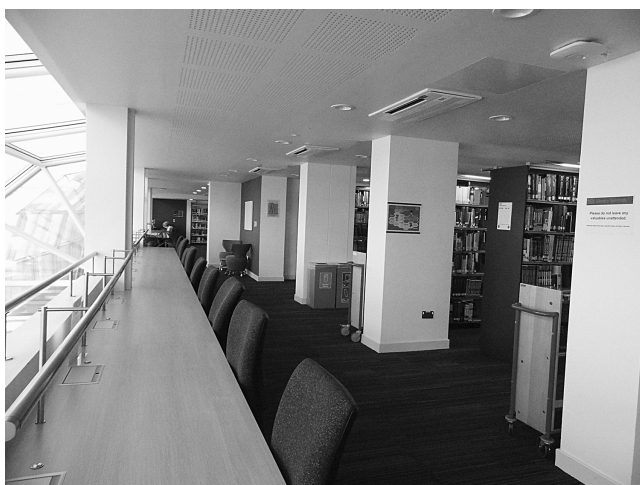
Submitted by Susan Isaac, MA, Library Services

King's College London is a central London university with six libraries spread across five campuses. The two libraries on the Denmark Hill campus support staff and students at King's College Hospital (KCH) and the Institute of Psychiatry (IoP). Both libraries are medical libraries with the Weston Education Center (WEC) serving undergraduates and National Health Service staff, while the IoP has a postgraduate/research focus. In 2010, King's launched a 5-year program to modernize the learning and teaching spaces across the college. The Denmark Hill libraries are the last phase of the program, costing \$6.24 million to complete.

Responsibility for delivering the project rested with the estates project team. Mace, a consultancy and construction company, was employed to coordinate all the parties involved: the architects Wilson Mason & Partners, the construction companies, King's information technology staff, and the library staff. The two libraries were designed in tandem starting early in 2012. The architects visited the site to discuss the functions of the space, returning with drawings that were refined in a series of meetings until they met anticipated needs. The library manager was tasked with ensuring that "business as usual" continued throughout the project as best it could be by managing as many stakeholder needs as possible.

Both of the existing libraries were at capacity, with student numbers increasing on the campus. The décor had become tired, furniture was inflexible, issues existed with temperature control, and some areas were inaccessible to disabled users. The solutions for

Figure 4
Weston Education Center, First Floor, King's College London



Photograph by Susan Issac, King's College London.

each library were different, but the same finishes and furniture were to be used in both. The libraries are staffed by one team who work across the two sites, and the book collection has been reconfigured as one collection housed on two sites with material shelved in the library where teaching of the subjects occurs.

Technology has had a big impact on the way students learn and are taught. Access to electronic journals allowed the removal of print journal collections, increasing space for the book collection and greatly improving access to the distinguished historical collection at IoP. The project aimed to increase the visual connectivity of the libraries in the buildings. This was achieved by using glazed walls both within and outside the libraries making maximum use of natural light (Figure 4). The flow of space was improved by demolishing internal walls and removing staircases. This enabled a mix of study areas to be created comprising silent and group study, computer rooms, and a social coffee area. At WEC, the entrance was moved from the first to the ground floor enabling the colocation of enquiry and student service desks.

Color has been used to zone the libraries. Most of the space is

designated as quiet study with blue highlights on walls and carpet that changes to orange in group areas. Where possible, flexibility has been built into rooms using furniture that is easily moved and technology that allows a space to be used for teaching or study. Art work has been included in the overall design, comprising newly commissioned pieces and existing works at IoP. At WEC, a history wall has been created using historical pictures of King's College London.

Overall both the libraries have received very positive feedback since completion from staff, students, and stakeholders alike. People are encouraged to put their comments on a "Post-It" wall, which have included comments such as "I love it," "a fantastic job, thank you," and "Amazballs :)."

RCSI Library, Beaumont Hospital, Royal College of Surgeons, Dublin, Ireland

Submitted by Breffni Smith, BA, M Phil, DLIS, Assistant Librarian

In 2012, the Royal College of Surgeons in Ireland renovated the library in its main teaching hospital, Beaumont Hospital Dublin.

The library space was upgraded to meet the changing needs of medical students, researchers, academics, clinicians, and nurses. The librarian collaborated with the college estates project manager to redesign the building layout to enhance natural light and spaciousness and to meet requirements for improved study facilities and extended unstaffed open hours.

The renovation was completed within two months due to two main factors: cooperation between college and hospital departments, and preparation and planning by the librarian. Prior to the refurbishment, library staff carried out a major collection evaluation and deselection project and donated empty shelving to a local community drama club and school. The project manager built new relationships with hospital facilities managers, as cooperation from hospital security, waste management, technical services, information technology, and health and safety departments was crucial. The renovation included complete rewiring and plumbing as well as new heating, ceilings, flooring, lighting, a staircase, and furniture (Figure 5).

The library is a 1,759-square-foot, 2-story space with impressive tall windows from floor to ceiling. The second floor is a mezzanine study area with 130 study desks that was accessible only by a narrow spiral staircase. Changes made to the layout included:

1. The information desk was moved to a central location where queues would no longer block the doorway.
2. Two small computer rooms were amalgamated and extended by the removal of a partition wall.
3. Free-standing double-sided bookshelves were replaced by single-sided, wall-mounted bookshelves in a new enclosed area under the mezzanine balcony.
4. A gate was installed on the book enclosure so the area could be closed during unstaffed hours.
5. A group study room was created using glass partition walls in one corner of the second floor study area.

Figure 5
RCSI Library, Beaumont Hospital, Royal College of Surgeons



Photograph by Breffni Smith, Beaumont Hospital, Royal College of Surgeons.

6. Suspended lights were replaced with embedded ceiling lighting to allow flexibility to move study desks in the future.

7. Security cameras, door swipe timers, and automatic lighting timers were installed to manage unstaffed reading room access.

Changing the layout of the library vastly improved services and facilities. Final decorative touches were provided by paintings that hospital staff donated.

Lessons learned include the necessity of having the librarian closely involved in the design process as college staff and contract builders may not be familiar with the specific needs of library users. Advance planning is needed to provide alternative study facilities for students, storage space for library materials, and workspace for the librarian to continue providing library services. The project timeline should include the removal, storage, and relocation of library materials, and an extra week should be allowed in the timeline for the unexpected to happen. Communication, planning, and flexibility are key. Discussions that take place on-site in response to unexpected problems need to be followed up with emails so that all parties are aware of new ideas and decisions.

Biblioteca Campus Universitari Mar, Hospital del Mar, Barcelona, Spain

Submitted by Mar Garreta Gambús, BA, Universitat Pompeu Fabra, and Àngels Carles, PhD, Universitat Autònoma de Barcelona

Hospital del Mar is a public teaching hospital that belongs to Consorci Mar Parc de Salut de Barcelona (PSM) that is a consortia formed by hospitals, health centers, research centers, and medical schools. The three major education programs supported by the Hospital del Mar are:

- Universitat Autònoma de Barcelona (UAB) was founded in 1968 on a large campus located twenty kilometers from Barcelona. Clinical instruction is provided in the city by the Hospital del Mar Teaching Unit, which was established in 1972.

- Universitat Pompeu Fabra (UPF) opened in 1990 with three urban campuses in the city. Beginning in 1998, human biology studies have been offered at the Campus del Mar. In 2008, the Catalan Government approved the merger of medicine studies with UAB in the Hospital del Mar Teaching Unit.

- Nursing High School of Hospital del Mar is the third member and is part of the PSM consortia

with Hospital del Mar. This school was created in 1975 and is a department of UPF.

These programs share the Dr. Aiguader Building, which was built for the 1992 Olympic and Paralympic games as an anti-doping lab. Merging the academic and administrative activities has resulted in more effective management, promoting synergies and fostering collaboration between the three institutions.

The organizational convergence brought together the libraries supporting the three programs to form the Biblioteca Campus Universitari Mar (BCUM). The print collections of the three libraries were integrated into a single collection, with a single circulation management system. Each institution has access to its own digital collection from computers connected to its own network. Library staff have been consolidated, providing services to all of the community with the guidance of a library committee.

Programming for the new library began in 2007 with the architect planning only a study room, not a library. The space identified for the new facility was significantly constrained by the building mechanical infrastructure. Opportunities for additional space were explored, including the basement, but no additional space could be identified. In the design process, the merger played a central role. The library needed to serve a broad constituency, from students to physicians and researchers. Eight group study rooms were included in the design along with a computer classroom and computer support service. La Factoria is a learning and teaching support service where library patrons can access specialized technologies, including multimedia computers, DVD recorders, and image and video software.

Construction of what turned out to be phase 1 occurred during the summer of 2009, which also resulted in the final merger of the 3 libraries. Slightly more than 8,400 square feet was allocated for the new library, accommodating 10,500 volumes and seating for

Figure 6
Student Commons, Biblioteca Campus Universitari Mar



Photograph by Mar Garreta Gambús, Universitat Pompeu Fabra.

125 library patrons. While the space for the new library was limited, it was more space than the 3 libraries had previously occupied. Phase 2 was made possible in 2012, adding 5,100 square feet, increasing seating to 279, and improving lighting and space for new services (Figure 6).

While the programming, design, and construction proved to be very challenging, the new library provides a flexible space designed for study, group activities, library instruction, and support services. The result is a library that exemplifies the goals of the institutional reorganization.

Health Sciences Library, Royal Hallamshire Hospital, University of Sheffield Library, University of Sheffield, Sheffield, United Kingdom

Submitted by Keith Dean, BA (Hons), Dip Arc, Assistant Director and Head of Corporate Services, and Alison Little, BA (Hons), Dip HI, Head of Customer Relations and Alma Project Manager

The Health Sciences Library (HSL) <<http://www.shef.ac.uk/library/>> at the University of Sheffield, Sheffield, United Kingdom, provides services to the university's Faculty of Medicine, Dentistry and

Health, and to clinical staff of the major teaching hospitals in Sheffield. It opened in the Royal Hallamshire Hospital (RHH) in 1978. A branch at the Northern General Hospital opened a year later, moving to its current location in Samuel Fox House in 1998.

Although the RHH site had been improved since it first opened, a renovation project in 2012 was the first major refurbishment since 1978. It represents a radical redesign of the library space in the heart of the teaching hospital. The HSL project was coordinated alongside a refurbishment of significant areas of the medical school. The construction phase ran from April to November, resulting in a much improved customer experience, with social space and a cafe.

The library took the opportunity to reassess the design of study spaces and held focus groups with students and staff. A design brief was developed to help bring services more in line with current and future customer requirements. The remodeled space reflects the higher expectations that customers now have following the commissioning of the award-winning Information Commons <<http://www.shef.ac.uk/infocommons/>>.

One of the biggest changes was relocating HSL's main entrance to a new position immediately adjacent to the refurbished medical school foyer, making the library more accessible for students who account for the highest proportion of HSL users. A new internal route has enabled continued easy access from the rest of the hospital.

The new HSL is brighter, is more open and accessible, and has much improved power and data connectivity. All the study space furniture and shelving is new. There is a wider range of types of study environments in more appropriate ratios. These include a silent study room, two group study rooms, and in the main study area, a mix of individual study spaces, open access workstations, collaboration spaces, and less formal seating areas (Figure 7). A cluster of computers dedicated to hospital-network access has been retained, and

Figure 7
Health Sciences Library Main Room, Royal Hallamshire Hospital



Photograph by Ian M Spooner, Ian M Spooner Photography.

height-adjustable desks suitable for users in wheelchairs have been incorporated. Immediately adjacent to the new entrance are an information desk and self-service facilities (e.g., copiers, printers, self-return, and check-out) to ensure that services are streamlined, particularly during unstaffed open hours. Office accommodations have been reconfigured into one large open-plan work area to maximize efficiency. Housed stack journals and books were reviewed in line with comments received from the focus groups, with some weeding occurring.

Additional funding was made available from gifts and donations made by alumni of the university. In collaboration with colleagues from the university's Development and Alumni Relations Office, staff used funds toward an objective of

making a significant difference to 1 specific project space. The silent study room was targeted, and high-quality study chairs for all workstations in that room were purchased as well as some additional furniture to create a soft-seating area. In addition, a student photography competition was held, and the best 14 images from around 350 submissions were selected to be enlarged, framed, and displayed.

Use of the physical library has increased dramatically since the refurbishment. Over a 6-month period from January to June 2013, usage increased by 75% in comparison to the same period in 2011, with a massive 138% increase during the 2 months leading up to the main examination period. Customer feedback has been very positive. Customers particularly

like the improved levels of daylight and the freshness that the project has brought to their study environment as well as the direct physical link between the library and the other working and social spaces of the Medical School.

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